

CLAIMS

- 1 – Base-station for interrogating electronic tags, that comprises at least one reader adapted to transmit a series of requests to said electronic tags by means of at least
5 one antenna made up of a coil of conducting wires, each coil encompassing at least two parts around which current circulates, in the coil, in two opposite directions.
- 2 – Base-station according to claim 1, wherein at least one of said coil has a symmetrical form.
- 3 – Base-station according to claim 1, wherein the coil of at least one antenna
10 extends over a rectangular shape and passes noticeably through the middle of said rectangular shape so as to separate two of said parts.
- 4 – Base-station according to claim 3, wherein said coil passes through the middle of said rectangle parallel to one side of said rectangular shape so as to separate two of said parts having rectangular shapes of identical dimensions.
- 15 5 – Base-station according to claim 3, wherein said coil passes through the middle of said rectangle along a diagonal of said rectangle so as to separate two of said parts having triangular shapes of identical dimensions.
- 6 – Base-station according to claim 1, wherein the coil of at least one antenna extends over a rectangular shape and passes two times across said rectangle so as
20 to separate three of said parts around which the current circulates, in the coil, alternately, in opposite directions.
- 7 – Base-station according to claim 6, wherein one of said three parts has a rectangular shape and presents a surface that is noticeably equal to an half of the surface of said antenna and is surrounded by two of said parts, each of said two
25 parts having a rectangular shape and presenting a surface that is noticeably equal to a quarter of the surface of said antenna.
- 8 – Base-station according to claim 1, wherein information transmitted between a base-station and a tag is sent in amplitude modulation of a magnetic field generated by the coil.
- 30 9 – Base-station according to claim 1, that comprises at least one antenna associated to each of three axes perpendicular to each other, the reader being adapted to repeat a sequence of requests successively with different antennas.
- 10 – Base-station according to claim 9, wherein said sequence of requests is limited just to a binary datum stored by the electronic tags.

11 – Base-station according to claim 10, wherein the reader is adapted to determine a value of the binary datum according to a time interval during which an electronic tag responds.

5 12 – Base-station according to claim 10, wherein, if said binary datum is a pre-defined value, the reader discontinues the sequence of requests and reads an identifier of the electronic tag.

13 – Base-station according to claim 12, wherein said pre-defined value represents the absence of passage close to another base-station.

10 14 – Base-station according to claim 12, wherein said pre-defined value is, chronologically, represented in the first time for signal emission by an electronic tag.

15 – Base-station according to claim 1, that comprises two symmetrical panels comprising similar antennas.

16 – Base-station according to claim 1, wherein the reader is adapted to receive responses from said electronic tags on each antenna.

15 17 – Base-station according to claim 16, wherein the reader is adapted to detect attenuation, during a pre-defined length of time, of one cycle out of two, said attenuation being performed by an electronic tag.